





```
1 0001 0 XTITLE 'EDTSFDEC - format a decimal number'
2 0002 0 MODULE EDTSFDEC (
3 0003 0 IDENT = 'V04-000'
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1 ****
7 0007 1 ****
8 0008 1 *
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26 0026 1 *
27 0027 1 *
28 0028 1 ****
29 0029 1 *
30 0030 1 *
31 0031 1 ++
32 0032 1 FACILITY: EDT -- The DEC Standard Editor
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 Format a decimal number.
37 0037 1
38 0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
39 0039 1
40 0040 1 AUTHOR: Bob Kushlis, CREATION DATE: March 18, 1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. DJS 19-FEB-1981. This module was created by
45 0045 1 extracting routine EDTSSFMT DCML from module FORMAT.
46 0046 1 1-002 - Regularize headers. JBS 05-Mar-1981
47 0047 1 1-003 - Rewrite to use recursion. This saves 17 words over version 1-002
48 0048 1 on the PDP-11. JBS 05-Mar-1981
49 0049 1 1-004 - Correct infinite recursion. JBS 02-Apr-1981
50 0050 1 1-005 - Improve the appearance of the listing. JBS 14-Jun-1983
51 0051 1 !--
52 0052 1
```

```
54 0053 1 XSBTTL 'Declarations'  
55 0054 1 !  
56 0055 1 ! TABLE OF CONTENTS:  
57 0056 1 !  
58 0057 1 !  
59 0058 1 REQUIRE 'EDTSRC:TRAROUNAM';  
60 0497 1 !  
61 0498 1 FORWARD ROUTINE  
62 0499 1 EDT$SFMT_DCML : NOVALUE;  
63 0500 1 !  
64 0501 1 !  
65 0502 1 ! INCLUDE FILES:  
66 0503 1 !  
67 0504 1 !  
68 0505 1 REQUIRE 'EDTSRC:EDTREQ';  
69 0640 1 !  
70 0641 1 !  
71 0642 1 ! MACROS:  
72 0643 1 !  
73 0644 1 !  
74 0645 1 !  
75 0646 1 ! EQUATED SYMBOLS:  
76 0647 1 !  
77 0648 1 !  
78 0649 1 !  
79 0650 1 ! OWN STORAGE:  
80 0651 1 !  
81 0652 1 !  
82 0653 1 !  
83 0654 1 ! EXTERNAL REFERENCES:  
84 0655 1 !  
85 0656 1 ! In the routine
```

```
87 0657 1 XSBTTL 'EDTSSFMT_DCML - format a decimal number'
88 0658 1
89 0659 1 GLOBAL ROUTINE EDTSSFMT_DCML (
90 0660 1     N
91 0661 1     ) : NOVALUE =
92 0662 1
93 0663 1     ++
94 0664 1     FUNCTIONAL DESCRIPTION:
95 0665 1
96 0666 1     Convert a decimal number to displayable ASCII in the format buffer.
97 0667 1     The number is written with a leading minus and leading zeros suppressed.
98 0668 1
99 0669 1     FORMAL PARAMETERS:
100 0670 1
101 0671 1     N           The number to write out.
102 0672 1
103 0673 1     IMPLICIT INPUTS:
104 0674 1     NONE
105 0675 1
106 0676 1
107 0677 1     IMPLICIT OUTPUTS:
108 0678 1
109 0679 1     NONE
110 0680 1
111 0681 1     ROUTINE VALUE:
112 0682 1
113 0683 1     NONE
114 0684 1
115 0685 1     SIDE EFFECTS:
116 0686 1
117 0687 1     Calls itself for large numbers.
118 0688 1
119 0689 1     --
120 0690 1
121 0691 2     BEGIN
122 0692 2
123 0693 2     EXTERNAL ROUTINE
124 0694 2     EDT$$FMT_CH : NOVALUE;
125 0695 2
126 0696 2     LOCAL
127 0697 2     POSITIVE_N;
128 0698 2
129 0699 2     +
130 0700 2     See if we should put out a minus.
131 0701 2     -
132 0702 2
133 0703 2
134 0704 2     IF (.N LSS 0)
135 0705 2     THEN
136 0706 2     BEGIN
137 0707 2     EDTSSFMT_CH (%C'-');
138 0708 2     POSITIVE_N = -.N;
139 0709 2     END
140 0710 2     ELSE
141 0711 2     POSITIVE_N = .N;
142 0712 2     +
143 0713 2     If the number is greater than or equal to 10, print
```

```

: 144 0714 2 ! the leading digits first.
: 145 0715 2 !-
: 146 0716 2
: 147 0717 2 IF (.POSITIVE_N GEQ 10) THEN EDTSSFMT_DCML (.POSITIVE_N/10);
: 148 0718 2
: 149 0719 2 !+
: 150 0720 2 ! Now print the low-order (last) digit.
: 151 0721 2 !-
: 152 0722 2 EDTSSFMT_CH ((.POSITIVE_N MOD 10) + '0');
: 153 0723 1 END; ! of routine EDTSSFMT_DCML

```

```
.TITLE EDTSFDEC EDTSFDEC - format a decimal number
.IDENT \V04-000\
```

```
.EXTRN EDTSSFMT_CH
```

```
.PSECT _EDT$CODE,NOWRT, SHR, PIC,2
```

		54 00000000G	00 9E 00002	.ENTRY EDTSSFMT_DCML, Save R2,R3,R4	0659
		53 04	AC D0 00009	MOVAB EDTSSFMT_CH, R4	0703
			0A 18 0000D	MOVL N, R3	0706
			2D DD 0000F	BGEQ 1\$	0707
		64	01 FB 00011	PUSHL #45	0703
		52	53 CE 00014	CALLS #1, EDTSSFMT_CH	0710
			03 11 00017	MNEGL R3, POSITIVE_N	0717
		52	53 D0 00019	BRB 2\$	0722
		0A	52 D1 0001C	MOVL R3, POSITIVE_N	0723
			2\$:	CMPL POSITIVE_N, #10	
			08 19 0001F	BLSS 3\$	
		7E	52 0A C7 00021	DIVL3 #10, POSITIVE_N, -(SP)	
7E	00	D7	AF 01 FB 00025	CALLS #1, EDTSSFMT_DCML	
50	50		52 01 7A 00029	EMUL #1, POSITIVE_N, #0, -(SP)	
			3\$:	EDIV #10, (SP)+, R0, R0	
			8E 0A 7B 0002E	PUSHAB 48(R0)	
			30 A0 9F 00033	CALLS #1, EDTSSFMT_CH	
			64 01 FB 00036	RET	
			04 00039		

```
; Routine Size: 58 bytes. Routine Base: _EDT$CODE + 0000
```

```
: 154 0724 1
: 155 0725 1 !<BLF/PAGE>
```

EDTSFDEC  
V04-000      EDTSFDEC - format a decimal number  
                 EDTSSFMT\_DCML - format a decimal number  
                 157      0726 1 END  
                 158      0727 1  
                 159      0728 0 ELUDOM

H 11  
16-Sep-1984 00:20:37      VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 12:23:05      DISKS\$VMSMASTER:[EDT.SRC]FDEC.BLI;1      Page 5 (4)

! of module EDTSFDEC

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	58	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	-----	Symbols	-----	Pages	Processing
	Total	Loaded	Percent	Mapped	Time
\$255\$DUA2B:[EDT.SRC]EDT.L32;1	377	0	0	40	00:00.2
\$255\$DUA2B:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS\$:\$FDEC/OBJ=OBJ\$:\$FDEC MSRC\$:\$FDEC.BLI/UPDATE=(ENH\$:\$FDEC)

Size:      58 code + 0 data bytes  
Run Time:    00:09.6  
Elapsed Time: 00:12.6  
Lines/CPU Min: 4564  
Lexemes/CPU-Min.: 12119  
Memory Used: 58 pages  
Compilation Complete

0133 AH-BT13A-SE  
VAX/VMS V4.0

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